Record Nr. UNINA9910438112003321 Handbook of engineering acoustics / / Gerhard Muller, Michael Moser, **Titolo** editors Pubbl/distr/stampa Berlin, : Springer, 2013 **ISBN** 1-283-84925-9 3-540-69460-9 Descrizione fisica 1 online resource (703 p.) Altri autori (Persone) MullerGerhard MoserMichael Disciplina 620.2 620.21 Acoustical engineering Soggetti Noise control Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Fundamentals -- Acoustic Measurements -- Numerical Acoustics --The Effects of Sound on Humans -- Noise Immission Assessment --Noise Emission Assessment -- Sound propagation in the Open Space -- Building Acoustics -- Sound Absorption -- Structure Borne Sound --Room Acoustics -- Silencers -- Active Noise and Vibration Control --Noise caused by Construction Work -- Sound Sources -- Traffic Noise --Road -- Traffic Noise and Vibrations - Railway -- Traffic Noise -Aircraft -- Sound Reinforcement Techniques -- Urban Noise Protection -- Flow-Induced Noise -- Ultrasound -- Vibrations -- Index. Sommario/riassunto This book examines the physical background of engineering acoustics, focusing on empirically obtained engineering experience as well as on measurement techniques and engineering methods for prognostics. Its goal is not only to describe the state of art of engineering acoustics but also to give practical help to engineers in order to solve acoustic problems. It deals with the origin, the transmission and the methods of the abating different kinds of air-borne and structure-borne sounds caused by various mechanisms - from traffic to machinery and flow-

induced sound. In addition the modern aspects of room and building acoustics, as well as psychoacoustics and active noise control, are